130.24

ENTRY

-8.35

SINCE FILE

132.65

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- In the nematode C. elegans, the gonad acquires a U-shape by the directed migration of a specialized leader cell, which is located at the tip of the growing gonadal arm. The gon-1 gene is essential for gonadal morphogenesis: in gon-1 mutants, no arm elongation occurs and somatic gonadal structures are severely malformed. Here we report that gon-1 encodes a secreted protein with a metalloprotease domain and multiple thrombospondin type-1-like repeats. This motif architecture is typical of a small family of genes that include bovine procollagen I N-protease (PlNP), which cleaves collagen, and murine ADAMTS-1, the expression of which correlates with tumor cell progression. We find that gon-1 is expressed in 2 sites, leader cells and muscle, and that expression in each site has a unique role in forming the gonad. We speculate that GON-1 controls morphogenesis by remodelling basement membranes and that regulation of its activity is crucial for achieving RE.CNT 54

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- ALL CITATIONS AVAILABLE IN THE RE FORMAT